

REMARKS

Claims 1 to 20 are pending in the application upon entry of the above amendments. The specification, the Abstract and Figure 19 have been amended as noted above. Entry and consideration of the above amendments to the present application is respectfully requested.

I. Objections to the Specification:

The specification has been objected to for the following reasons: (1) the Abstract contains more than one paragraph; (2) the Examiner contends that the paragraph contained at page 8, lines 18 to 19 is confusing; and (3) the Examiner contends that the disclosure contained on page 13, lines 4 to 13 is not suitable in light of the fact that Table 1 does not contain a listing for silicon.

With regard to items (1) and (2), these objections have been rendered moot in light of the amendments made to the specification. Accordingly, withdrawal of these objections is respectfully requested.

With regard to item (3), as is pointed out on page 6, lines 22 to 27 of the specification as filed,

[a]pproximate K-values or, in some cases, a range of K-values, are shown below in Table 1 for several exemplary dielectric materials. **It is understood that the present invention is not limited to the specific dielectric materials disclosed herein, but may include any appropriate standard-K and high-K dielectric materials which are known and are compatible with the remaining elements of the semiconductor device with which the dielectric materials are to be used.**

(emphasis added). In light of the above passage of the specification as filed, it is believed that the disclosure contained on page 13, lines 4 to 13 is correct. That is, the inclusion of silicon as an element of a standard-K dielectric material in the list provided

on page 13, lines 4 to 13 is not an error, nor does Table 1 need to include all of the possible materials that could be used in the present invention as a standard-K dielectric material since it is clearly stated that Table 1 lists several exemplary dielectric materials.

II. Claim Objections:

Claims 7 and 16 have been objected to by the Examiner. Specifically, the Examiner contends that claims 7 and 16 do not further limit the subject matter of claims 1 and 10, respectively.

With regard to claims 7 and 16, the Examiner's attention is drawn to the fact that claims 1 and 10 recite the step of annealing a layered dielectric structure at an elevated temperature to form a composite dielectric layer about the boundary of each first dielectric material layer/second dielectric material layer. Based on this step, the composite dielectric layer may be annealed to form: (1) a composited dielectric layer which includes therein a portion of the first and second dielectric material layers; or (2) a composite dielectric material layer which includes therein all of the first and second dielectric material layers.

Given the principle of claim differentiation, claims 7, 8, 16 and 17, further specify the nature of the composite dielectric layer of claims 1 and 10. Since claims 7 and 16 further specify the structure of the composite layer of claims 1 and 10, respectively, these claims further define the methods of claims 1 and 10 and are therefore proper claims.

Accordingly, withdrawal of the objection to claims 7 and 16 is respectfully requested.

III. The 35 U.S.C. § 112, First Paragraph Rejections:

Claims 1 to 20 have been rejected under 35 U.S.C. § 112, first paragraph. Specifically, the Examiner contends that the specification is non-enabling for the terms "standard-K dielectric material" and "high-K dielectric material".

The Examiner's attention is directed to the fact that the specification defines both of the above terms on page 6, lines 8 to 21. Additionally, the disclosure contained on pages 7 and 8 of the specification give examples of compounds which fall within the definitions provided on page 6 of the specification.

In light of the disclosure contained in the specification and the knowledge attributable to one of ordinary skill in the art, the terms "standard-K dielectric material" and "high-K dielectric material" are adequately enabled by the specification as filed. Additionally, the Examiner's attention is drawn to commonly owned United States Patent No. 6,451,647. This patent has claims which issued containing the term "high-K dielectric material"

Accordingly, the terms "standard-K dielectric material" and "high-K dielectric material" are believed to be enabled by the specification as filed and withdrawal of the rejection of claims 1 to 20 is respectfully requested.

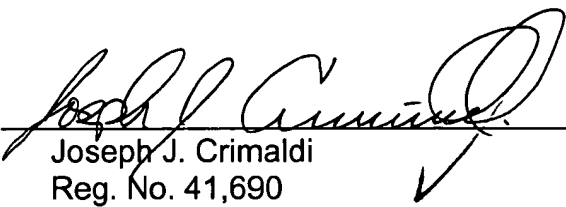
IV. Conclusion:

Thus, withdrawal of the above-mentioned objections and rejections, and allowance of claims 1 to 20 is respectfully requested.

Should the Examiner believe that a telephone interview would be helpful to expedite favorable prosecution, the Examiner is invited to contact Applicant's undersigned attorney at the telephone number listed below.

In the event any fees are due in connection with the filing of this document, the Commissioner is authorized to charge those fees to our Deposit Account No. 18-0988 under Attorney Docket No. G0518 (AMDSPG0518US).

Respectfully submitted,
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